SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY BOXBOROUGH
Massachusetts Facility
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ELECTRICAL

Valid to: September 30, 2025 Certificate Number: 0214.14

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following Electromagnetic Compatibility/Interference (EMC/EMI), Lightning Transients, Surges and Product Safety tests:

Tests:	**Test Method(s)** [1]**:**
Emissions	
Radiated/Conducted (*3 m Semi Anechoic Chamber*) (*10m Semi Anechoic Chamber*)	47 CFR, FCC Part 15B (using ANSI C63.4:2014); 47 CFR, FCC Part 18 (using MP-5:1986); ICES-003; CISPR 32 (*excluding Annex H*); EN 55032(*excluding Annex H*); KS C 9832 (*excluding Annex H*); CISPR 11; EN 55011; CISPR 14-1 (*excluding disturbance power measurements and click measurements*); EN 55014-1(*excluding disturbance power measurements and click measurements*); VCCI V-3 (*up to 6 GHz*); VCCI-CISPR 32:2016 (*excluding Annex H)*; CNS 15936:2016 (*up to 6 GHz*); AS/NZ CISPR 32; MIL-STD-461[2]* (Methods CE01, CE03, RE01, & RE02); MIL-STD-461* (Methods CE101, CE102, CE106 [*up to 18 GHz*], RE101, & RE102); MIL-STD-462; MIL-STD-462D; RTCA/DO-160[2] C, D, E, F, & G (Section 21); CISPR 25 (*clauses 6.3, 6.4, 6.5 only*); EN 55025 (*clauses 6.3, 6.4, 6.5 only*)
Current Harmonics	EN/IEC 61000-3-2
Voltage Fluctuations & Flicker	EN/IEC 61000-3-3
Magnetic Effects	RTCA/DO-160D, E, F & G (Section 15)

Tests:	**Test Method(s) [1]:**
Immunity	
Electrostatic Discharge (ESD)	IEC/EN 61000-4-2; KS C 9610-4-2; RTCA/DO-160[2] D, E, F, & G (Section 25); MIL-STD-1686; MIL-STD-461 (CS118)
Radiated Immunity	IEC/EN 61000-4-3; KS C 9610-4-3; RTCA/DO-160[2] C, D, E, F, & G (Section 20); MIL-STD-461[2]* (Methods RS01, RS02, & RS03); MIL-STD-462; MIL-STD-462D; MIL-STD-461[2]* (Methods RS101 & RS103); MIL-HDBK-240; DoD-STD-1399 Section 70;
Electrical Fast Transient/Burst	IEC/EN 61000-4-4; KS C 9610-4-4
Electromagnetic Pulse (EMP)	EN/IEC 61000-4-9; EN/IEC 61000-4-10
Surge Immunity	EN/IEC 61000-4-5 (*excluding 6.2*); IEC/EN 61000-4-12; KS C 9610-4-12; RTCA/DO-160[2] C, D, E, F & G (Sections 17, 19, & 22)
Conducted Immunity	IEC/EN 61000-4-39; IEC/EN 61000-4-6; KS C 9610-4-6; IEC/EN 61000-4-16; RTCA/DO-160 C, D & E (Sections 18 & 20); MIL-STD-461[2]* (Methods CS01, CS02, & CS06); MIL-STD-462; MIL-STD-462D; MIL-STD-461[2]* (Methods CS101, CS106, CS109, CS114, CS115, CS116 & CS117)
Voltage Dips, Short Interruptions, & Line Voltage Variations	IEC/EN 61000-4-11; KS C 9610-4-11; EN/IEC 61000-4-29; IEC 61000-4-34:2005 + A1:2009
Power Quality	RTCA/DO-160[2] C, D, E, F, & G (Section 16); MIL-STD-1399-300[2] A & B; MIL-STD-704[2] A, B, C, D, E, & F; MIL-STD-1275 B, C, & D; ATIS 0600315*; ETSI/EN 300-132-2; ETSI/EN 300-132-3

Tests:	**Test Method(s) [1]:**
Generic/Product Family Standards &Industry Standards	IEC/EN 61000-6-1; KS C 9610-6-1; IEC/EN 61000-6-2; KS C 9610-6-2; IEC/EN 61000-6-3; IEC/EN 61000-6-4; IEC/EN 60601-1-2; IEC/EN 61326-1; GR-1089-CORE; ETSI EN 300 386 (*excluding clause 12.4*); ATT-TP-76200; CISPR 24; EN 55024; KN 24; CISPR 35 (*excluding Annex A, B, C, D, E, F.4, G, H*); EN 55035 (*excluding Annex A, B, C, D, E, F.4, G, H*); KS C 9835 (*excluding Annex A, B, C, D, E, F.4, G, H*)
Acoustics	
Acoustic Characteristics of Materials & Structures	CSA C22.2 No. 1010-1 (section 12.5); MIL-STD-740-2[2]; UL 61010A-1; ISO 7779
Sound Power/Sound Pressure	CSA C22.2 No. 1010-1 (section 12.5); GR-63-CORE; ETS 300 753; MIL-STD-740-1[2]; UL 61010A-1; ISO 7779

[1] When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories.

[2] This laboratory performs field testing activities for these tests.

*NOTE: The laboratory's accreditation includes all revisions of the standards identified by this mark above.

Testing Activities Performed in Support of FCC Declaration of Conformity and Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1[3]

Rule Subpart/Technology	**Test Method**	**Maximum Frequency (MHz)**
Unintentional Radiators Part 15B	ANSI C63.4:2014	40000
Industrial, Scientific, and Medical Equipment Part 18	FCC MP-5 (February 1986)	40000

[3]Accreditation does not imply acceptance to the FCC equipment authorization program. Please see the FCC website (https://apps.fcc.gov/oetcf/eas/) for a listing of FCC approved laboratories.

Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY BOXBOROUGH

Boxborough, MA

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 31st day of October 2023.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0214.14
Valid to September 30, 2025
Revised November 9, 2023

For the tests to which this accreditation applies, please refer to the laboratory's Electrical Scope of Accreditation.